

Appl. No: 09/835,876

Reply to Office Action of December 2, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A method for implementing functionality within a network on behalf of first and second computers communicating with each other through the network, the method comprising the acts of:

providing a front-end computer within the network having an interface for communicating data traffic with the first computer, wherein the front-end computer implements a web server;

providing a back-end computer within the network having an interface for communicating data traffic with the second computer, wherein the back-end computer implements a web server;

providing a communication channel coupling the front-end computer and the back-end computer; [[and]]

encoding data traffic over the communication channel in a first process in the front-end computer;

encoding data traffic over the communication channel in a second process in the back-end computer[.]]

decoding the encoded data traffic from the front-end computer in a third process in the back-end computer; and

decoding the encoded data traffic from the back-end computer in a fourth process in the front-end computer,

wherein the first, second, third, and fourth processes and the second process implement preselected compatible semantics to perform the encoding and the decoding of the data traffic.

Claims 2-3 (Cancelled)

Claim 4 (currently amended): The method of claim 1 wherein the preselected compatible semantics comprise processes for sharing operational

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information for the front-end and back-end computers and wherein the act of encoding comprises:

communicating quality of service information about the communication channel between the front-end and back-end computers.

Claim 5 (Currently Amended): The method of claim 1 wherein the act of encoding comprises:

communicating time-based synchronization information defined by the compatible semantics between the front-end computer and the back-end computer.

Claim 6 (Currently Amended): The method of claim 1 wherein the act of encoding comprises compression/decompression processes defined by the compatible semantics.

Claim 7 (Currently Amended): The method of claim 1 wherein the act of encoding comprises encryption/decryption processes defined by the compatible semantics.

Claim 8 (Currently Amended): The method of claim 1 wherein the act of encoding comprises forward error correction processes defined by the compatible semantics.

Claim 9 (Currently Amended): A system for transporting data through a network comprising:

a plurality of client applications generating requests for network services;

a plurality of network servers configured to provide services in response to received requests;

a front-end web server within the network having a first interface configured to handle request/response traffic with the client applications;

a back-end web server within the network having a first interface configured to handle request/response traffic with a selected set of network servers;

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a communication channel through the network between the front-end web server and the back-end web server,

wherein the front-end server and back-end server are time synchronized and the back-end server comprises means for ascertaining when a request/response was issued by the front-end server.

Claim 10 (Cancelled)

Claim 11 (Original): The system of claim 9 wherein the front-end server and back-end server are time synchronized and the front-end server comprises means for ascertaining when a request/response was issued by the back-end server.

Claim 12 (Original): The system of claim 9 wherein the front-end server and back-end server include compression mechanisms for compressing traffic transported across the communication channel.

Claim 13 (Original): The system of claim 9 wherein the front-end server and back-end server include encryption mechanisms for encrypting traffic transported across the communication channel.

Claim 14 (Original): The system of claim 9 wherein the front-end server and back-end server include forward error correcting mechanisms for error correcting traffic transported across the communication channel.

Claim 15 (Currently Amended): A system for transporting data through a network comprising:

a plurality of network-connected applications generating requests for network services;

a plurality of network-connected computers configured to provide services in response to received requests;

a plurality of front-end computers each having at least one interface configured to handle request/response traffic with the network-connected applications;

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a plurality of back-end web computers each having at least one interface configured to handle request/response traffic with a selected set of the network-connected computers; and

a many-to-many communication channel through the network between the front-end web computers and the back-end web computers, wherein the front-end web computers each comprise means for encoding the request/response traffic including inserting time-based synchronization information as defined by a semantic common among the front-end and the back-end web computers, wherein the back-end computers each comprise means for decoding the encoded request/response traffic from any of the front-end web computers based on the common semantic, and wherein the back-end web computers comprise means for determining when the encoded request/response traffic was issued by the front-end servers.

Claim 16 (Original): The system of claim 15 wherein the many-to-many communication channel is dynamically re-configurable.

Claim 17 (Currently Amended): A system for transporting data through a network comprising:

a plurality of client applications generating requests for network services;

a plurality of network servers configured to provide services in response to received requests;

a front-end web server having at least one interface configured to handle request/response traffic with the client applications;

a plurality of back-end web servers each having at least one interface configured to handle request/response traffic with a selected set of network servers; and

a one-to-many communication channel through the network between the front-end web server and the back-end web servers, wherein the communications between the front-end web servers and the back-end servers provide time-based synchronization between each communicating pair of the servers.

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Claim 18 (Currently Amended): A system for transporting data through a network comprising:

a plurality of client applications generating requests for network services;

a plurality of network servers configured to provide services in response to received requests;

a front-end web server having at least one interface configured to handle request/response traffic with the client applications, to respond by generating a message including time-based synchronization information, and to compress the message when the received request/response traffic is not encrypted;

a one-to-many communication channel through the network between the front-end web server and the network servers.

Claims 19-31 (Cancelled)

Claim 32 (New): The method of claim 1, wherein the front-end and the back-end computers are programmably assigned to a particular web site.

Claim 33 (New): The method of claim 1, wherein software and hardware mechanisms implementing the processes of the front-end and the back-end computers are below the network protocol layer of an Open System Interconnection (OSI) model.

Claim 34 (New): The method of claim 1, wherein the first computer comprises a web browser and the second computer comprises a server providing a web site and wherein the web browser and the web site server are outside the network.